

EPA REGION 6

CONGRESSIONAL DISTRICT 03

Ascension Parish

Other Names: Darrow Oil

Updated 8/01/00

Site Description

Location: **!** Between Highway 75 and the Mississippi River, Ascension Parish, midway between

Baton Rouge and New Orleans. **!** 4.5 miles north of Darrow.

Population: ! 19,500 people live within 10 miles of site.

Setting: ! Rural, adjacent to the Mississippi River levee.

! Nearest residence is 0.3 miles south of the site.

! Nearest drinking water well is 0.5 miles south of the site.

! Area is generally flat and subject to water-ponding during heavy rains.

Hydrology: ! The site soil profile consists predominantly of silty and sandy clays, silts, and fine

sands to a depth of about 115-to-125 feet.

! Ground water is encountered generally at a depth of 6-to-12 feet and rises to within

a few feet of the ground surface.

! The horizontal ground water gradient is thought to vary during the year, but generally is anticipated to be away from the Mississippi River and to be less than one

foot per year.

! The vertical gradient varies during the year, but is generally downward, away from the River, and is estimated to be fairly steep during average Mississippi River flow

conditions.

Wastes and Volumes

1. Principal Pollutants:

! Polynuclear aromatic compounds (ex; 49,000 parts per billion (ppb) phenanthrene in sediment).

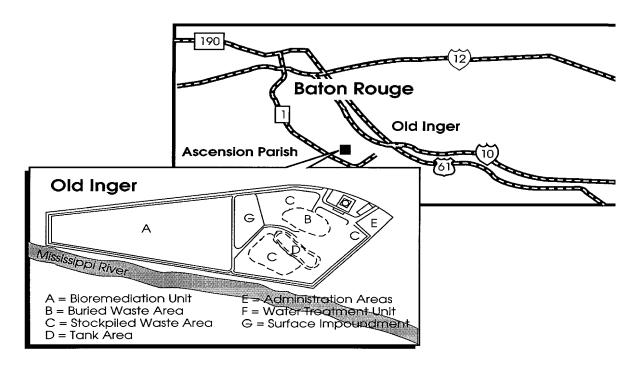
! Heavy metals (ex; 130 ppm zinc - sediment).

Site Assessment and Ranking

NPL LISTING HISTORY

Site HRS Score: 48.98 Proposed Date: 13/30/82 Final Date: 9/8/83 NPL Update: No. Original

Site Map and Diagram



The Remediation Process

Site History:

- ! 1967 began operations as an oil refinery.
- ! 1976 site was obtained by Old Inger Oil Refinery for use as an oil reclamation plant for refinery waste; waste oil brought to the site by barge and by truck.
- ! 1978 large spill occurred and the site was sold shortly thereafter.
- ! 1980 site was abandoned.

- ! April 1983 August 1988, five emergency removal actions were conducted to stabilize the site to include: site security, migration control, excavation and containment of consolidated soils, sampling and analysis.
- ! The site was on hold while resolving land ban issues with EPA Headquarters. On October 29, 1987, Headquarters submitted an approval with revisions to the original design. The Louisiana Department of Environmental Quality (LDEQ) Cooperative Agreement was amended in the amount of \$340,000, for the addition of liner, expanded ground water study, and associated engineering. This was awarded June 1988. Additional remedial action (RA) funds of \$1,646,308 were awarded to LDEQ on September 29, 1989.
- ! The RA contract for construction of the land treatment bioremediation unit was awarded 9/29/89. This first phase, Phase IV-A, started in 1990 and was completed in 1992.
- ! Supplemental ground water study began March 1990 under an Interagency Agreement Grant (IAG) with the U.S. Corps of Engineers (USACE).

Health Considerations:

- ! Ground water in area used for drinking.
- ! Surface water used for irrigation.

Other Environmental Risks:

! Ground water and soils are contaminated to a depth of 40 feet and 6 feet, respectively, by organic chemicals.

Record of Decision ———

Signed: September 25, 1984

Remedy:

- ! Close and seal an ungrouted on site well.
- ! Pump and treat shallow ground water via carbon absorption.
- ! Carbon adsorption treatment and discharge off site of contaminated surface waters on site.
- ! In situ containment and capping of slightly contaminated soils & sludge.
- ! On site land treatment of contaminated soils and sludge Treatment will include synthetic liner (per 10-29-87 HQ decision).

Other Remedies Considered Reason Not Chosen 1. Deep well disposal of contaminated fluids Cost 2. Off site disposal Cost; non-permanent remedy 3. On site landfill Possibility of major release if levee fails 4. No action Poses threat to public health and the environment

Community Involvement

Outreach activities: Responsibility of LDEQ

! Community Involvement Plan: Developed 11/82; Revised 4/85, 4/90.

Open houses and workshops: 01/90, Video 11/90, 10/24/98.
Original Proposed Plan Fact Sheet and Public Meeting: 6/84

! Original ROD Fact Sheet: 10/84

Milestone Fact Sheets: 4/85, 12/88, 10/89

! Citizens on site mailing list: 65

Constituency Interest: Most complaints are about odors
 Site Repository: Ascension Parish Library - Gonzales.

Technical Assistance Grant

! Availability Notice: May 1988

! Letters of Intent Received:

1) 6/18/88 from Ascension Superfund Koalition (ASK).

! Final Application Received: 2/23/92

! Grant Award: Signed by EPA on 05/28/92, accepted by applicant on 3/9/94

! Status: No funds were drawn down. Grant has been annulled and was closed 6/19/98.

Contacts —

! Remedial Project Manager: Bartolome J Cañellas, 214/665-6662, EPA (6SF-LP)

! State Contact: Tom Stafford, 504/765-0487, LDEQ

! Community Involvement: Bartolome J Cañellas, 214/665-6662, EPA (6SF-LP)

! Attorney: Keith Smith, 214/665-2157, EPA (6SF-DL)

! State Coordinator: Susan Jenkins, 214-665-6578, EPA (6SF-LT)

! Prime Contractor (First Phase): State Contractor - IT Corp. - (design and oversight)

Westinghouse Haztech, Inc. - (construction)

(Second Phase): State Contractor - Rust Engineering - (engineering oversight)
OHM Remediation Services - (waste application)

Enforcement ———

! None

Present Status and Issues —

! The EPA met with the State in February 1997 to expedite the schedule for proceeding with contract bids and implementation of the soils remedy (Second Phase or Phase IV-B and IV-C). The remedy includes on-site land treatment of heavily contaminated soils and sludges.

! Construction bid packages were advertised at the end of April 1997.

- ! The State planned to award the contracts for Second Phase of the remedial action by late 1997. A merge between the tentatively selected engineering oversight contractor and the land treatment (waste application) contractor, forced the State to re-evaluate the contracting scheme.
- ! On May 6, 1998, LDEQ faxed a Notice to Proceed to OHM Remediation Services, to act as the Waste Application Contractor.
- ! On May 7, 1998, LDEQ faxed a letter tentatively awarding Rust Environment & Infrastructure the new engineering oversight contract (pending completion and approval of a cost analysis, and approval by the Commissioner of Administration)
- ! Mobilization and start-up of remedial action (Phase IV-B and IV-C) started in fall 1998. This included setting up equipment, air monitoring, excavation, screening of soils, removal of tanks.
- ! An Open House was conducted by LDEQ on October 24, 1998.
- ! Application of the first layer or lift of contaminated soils to the bioremediation or Land Treatment Unit (LTU) started in December 1998.
- ! Soil mixing, tilling and operational activities started on the LTU in December 1998.
- ! As of August 18, 1999, fifty-eight thousand tons of soils have been excavated and screened or processed through the Trommel screen system.
- ! As of March 2000, the majority of the excavated soils has been excavated and treated on the LTU.
- ! A mix of on-site oily waste and water will be applied on the LTU for treatment (after pretreatment), while plans are developed for the final backfill of the treated soils, capping and final closure
- ! The State is also evaluating current ground water conditions after the removal of the original lagoons, the construction of the LTU, excavation and treatment of contaminated soils, and site backfilling with the treated soils.
- ! As of June 2000 the State is moving forward with the pre-treatment of the oily waste and water mix prior application on the LTU (anticipated August 2000), disposal activities related to the disposal of some gas cylinders uncovered during the excavation of the contaminated areas, and planning for the final grading and closure cap.
- ! Photographs showing current and past conditions before the remedial actions, are available in the EPA Internet pages at URL http://www.epa.gov/earth1r6/6sf/6sf-la.htm

Benefits

The immediate actions taken to reduce the contamination in the pits and lagoons and to limit site access reduced the potential for contact with site contamination and the further spread of contaminated materials. These initial cleanup actions reduced possible exposure pathways and further environmental impact while long-term cleanup activities proceed.

The State contractors have completed successfully the bioremediation of the majority of the contaminated soils on the LTU. Initial problems encountered in the handling and screening of excavated soils were solved by the addition of grain dust as a soil conditioner. Treated clean soils will eventually be relocated from the LTU to the areas from which they were excavated in the year 2000.